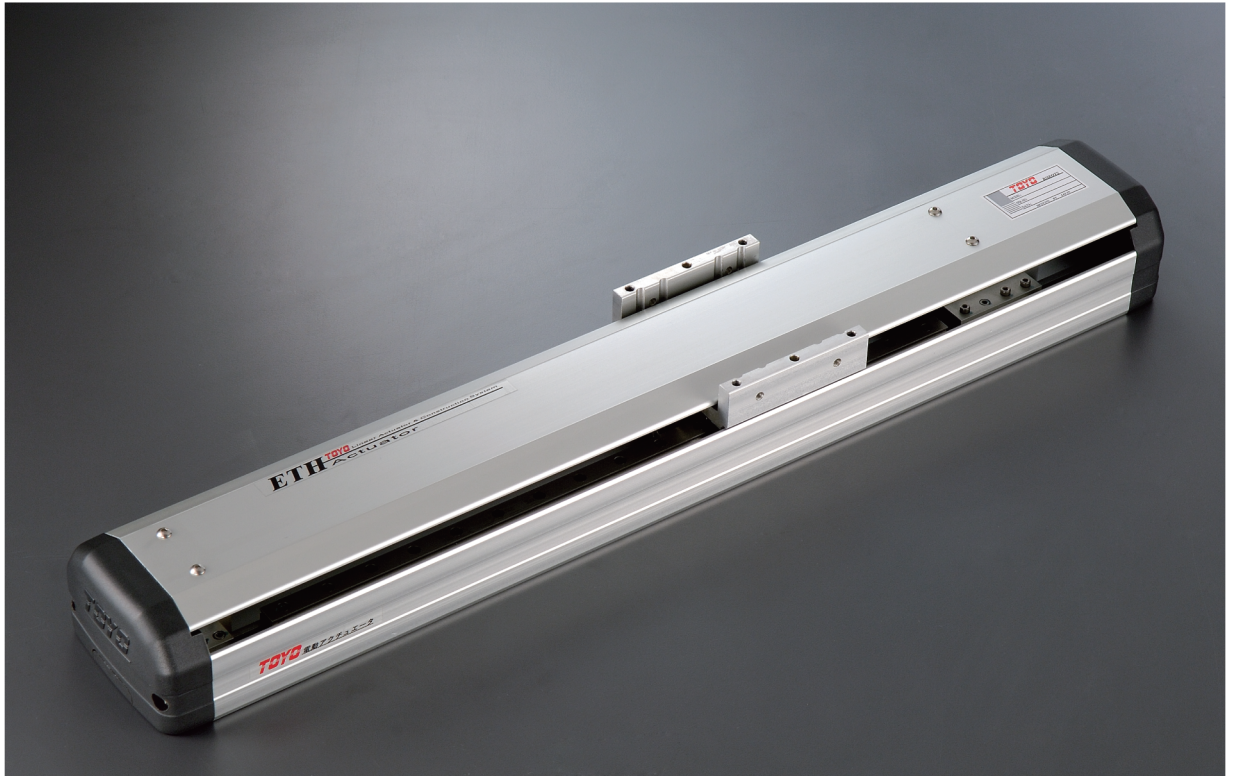


ETH12

1-axis

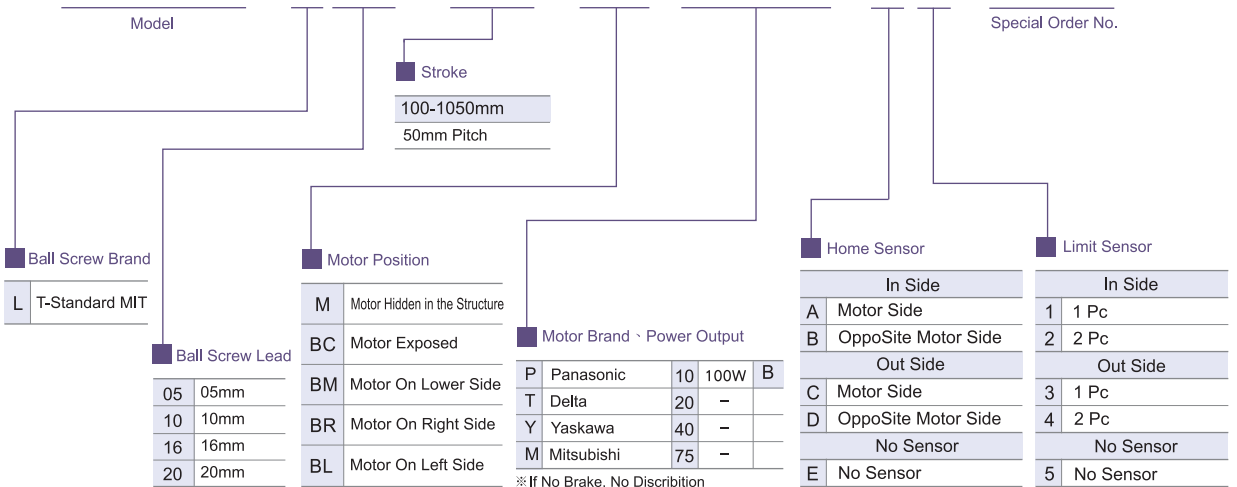
Ball Screw Drive



Maximum Stroke **1050mm** Maximum Speed **1000mm/s** Motor Output **100W** Ball Screw ϕ **16mm** Linear Guide **12X7.5-2pc**

Ordering Method

ETH12 - L 16 - 100 - M - M10B - C 4 - 0001

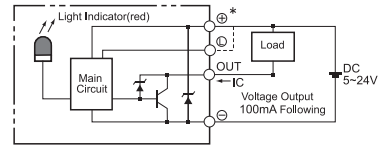


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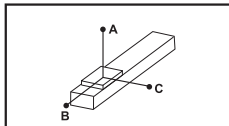
Specification

Function	Repeatability (mm)		±0.01			
	Belt Lead (mm)		5	10	16	20
	Maximum Speed (mm/s)		250	500	800	1000
	Maximum Payload	Horizontal (kg)	50	30	22	18
		Vertical (kg)	12	8	5	3
	Rated Thrust (N)		341	170	106	85
Stroke Pitch (mm)		100-1050mm / 50mm Pitch				
Parts	AC Servo Motor Output (w)		100			
	Ball Screw Ø (mm)		C7 φ 16			
	High Rigidity Linear Guide (mm)		12X7.5			
	Coupling (mm)		8X10			
	Home Sensor	Outside	EE-SX672(NPN)			
Built In		EE-SX674(NPN)				

Sensor Layout

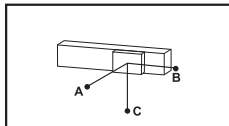


Allowable Overhang N.m



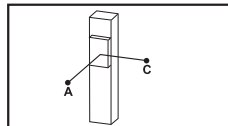
(Unit:mm)

Horizontal Installation	A	B	C
Lead 5	30kg	1200	158 311
	50kg	1100	124 124
	-	-	- -
Lead 10	15kg	1000	190 250
	25kg	900	190 170
	30kg	850	124 122
Lead 16	5kg	2150	1365 982
	10kg	1190	462 427
	22kg	1270	242 291
Lead 20	5kg	1936	1229 882
	10kg	1039	418 387
	15kg	1073	220 264



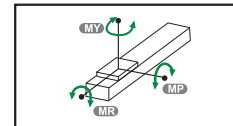
(Unit:mm)

Wall Installation	A	B	C
Lead 5	10kg	126	60 800
	20kg	70	30 600
	30kg	50	15 476
Lead 10	10kg	246	180 700
	20kg	150	80 515
	30kg	72	32 422
Lead 16	5kg	1068	976 1579
	10kg	405	278 776
	22kg	220	107 680
Lead 20	5kg	958	875 1420
	10kg	361	248 696
	15kg	107	95 610



(Unit:mm)

Vertical Installation	A	C
Lead 5	5kg	412 398
	10kg	394 356
	12kg	357 355
Lead 10	4kg	711 578
	6kg	534 414
	8kg	411 376
Lead 16	1kg	1210 1210
	2kg	1174 1174
	5kg	650 650
Lead 20	-	- -
	-	- -
	3kg	1030 802



(Unit:N.m)

Static Loading Moment

	Value
MY	150(N)
MP	150(N)
MR	130(N)

Suitable Motor Brand

Brand	Mark	Brake	Watt	AC-Voltage	Motor Model	Driver Model
Mitsubishi	M	No Brake (Horizontal Type)	100	220	HF-KP13	MR-J3-10A
		With Brake (Vertical Type)	100	220	HF-KP13B	MR-J3-10A
Panasonic	P	No Brake (Horizontal Type)	100	220	MSMD012P1S	MADDT1205
		With Brake (Vertical Type)	100	220	MSMD012P1T	MADDT1205
Delta	T	No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

Application
Standard Ball Screw
Rod Type Actuator
Standard Belt Type
Clean Room Ball Screw
Clean Room Belt Type
Linear Motor
Multi Axis
Alignment Stage
Reference

1 axis
ETH
ETH5M
ETH6M
ETH10
ETH12
ETH13
ETH14
ETH17
ETH22

ETH12

1-axis

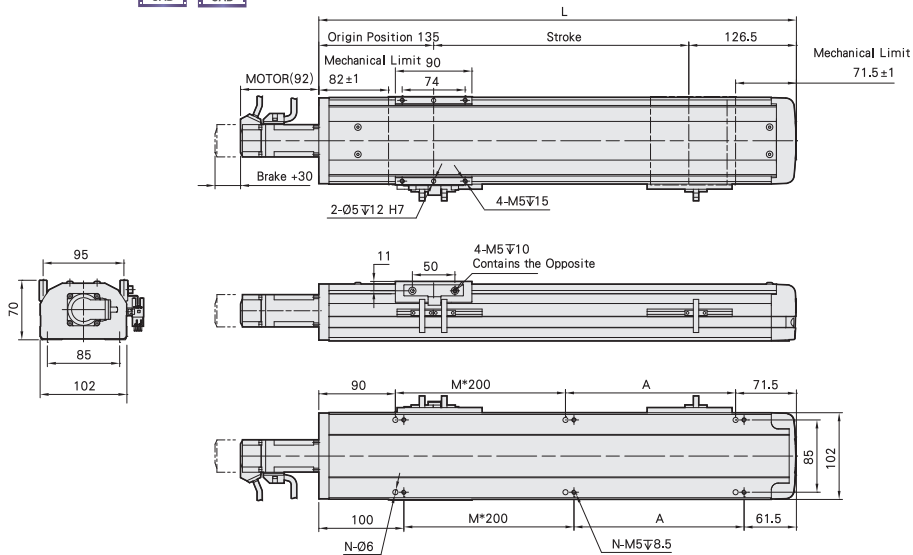
Motor Exposed /
Motor Hidden in the Structure

BC Motor Exposed



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(mm)



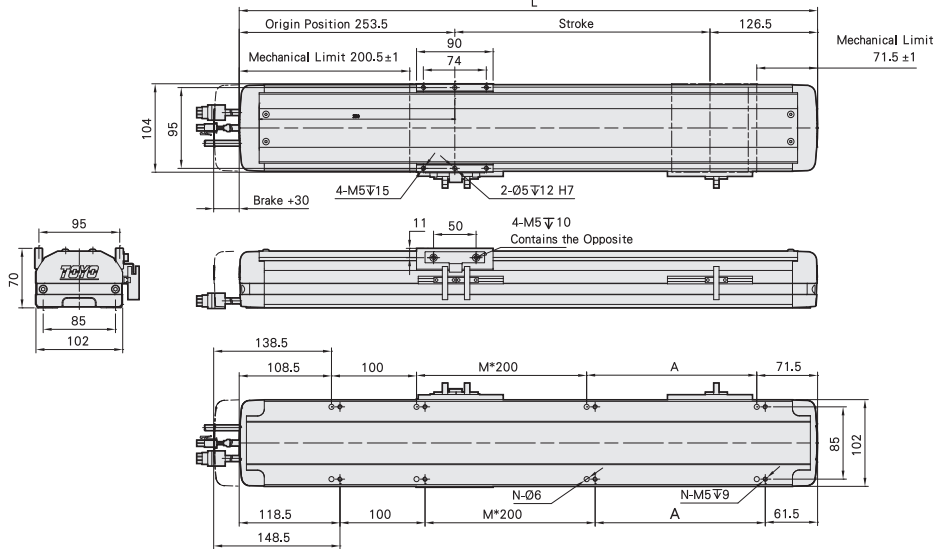
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	361.5	411.5	461.5	511.5	561.5	611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5	1011.5	1061.5	1111.5	1161.5	1211.5	1261.5	1311.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

M Motor Hidden in the Structure



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(mm)



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280	1330	1380	1430
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5
N	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

Motor On Left Side /
Motor On Right Side

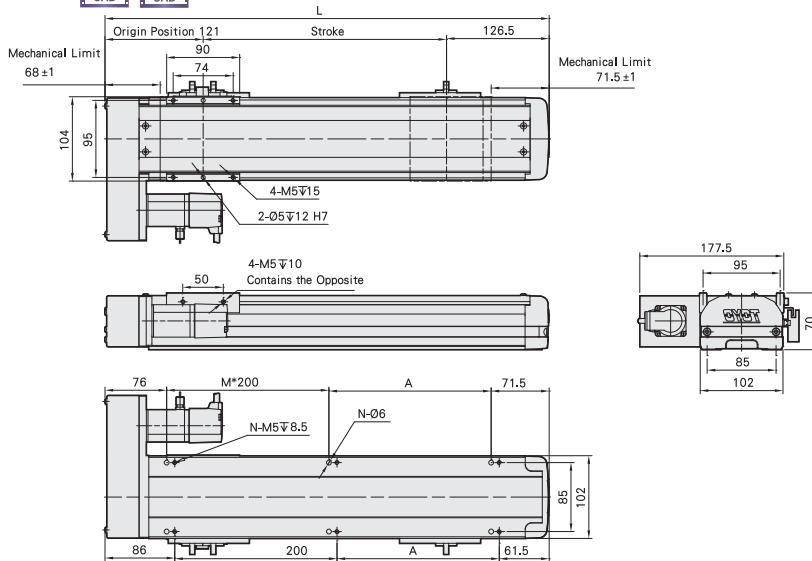
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BL Motor On Left Side



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(mm)



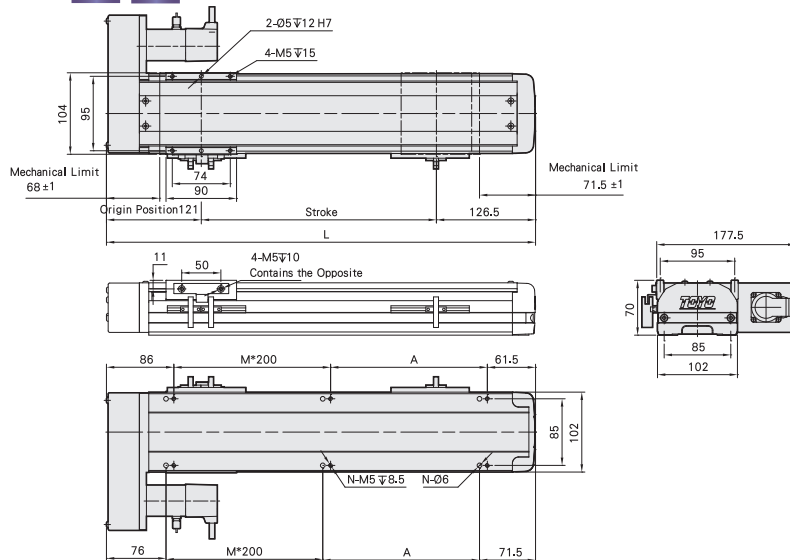
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	847.5	897.5	947.5	997.5	1047.5	1097.5	1147.5	1197.5	1247.5	1297.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

BR Motor On Right Side



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(mm)



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	847.5	897.5	947.5	997.5	1047.5	1097.5	1147.5	1197.5	1247.5	1297.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

Application
Standard/Ball Screw
Rod Type Actuator
Standard/Ball Type
Clean Room/Ball Screw
Clean Room/Ball Type
Linear Motor
Multi Axis
Alignment Stage
Reference

1 axis
ETH

- ETH5M
- ETH6M
- ETH10
- ETH12
- ETH13
- ETH14
- ETH17
- ETH22

ETH12

1-axis

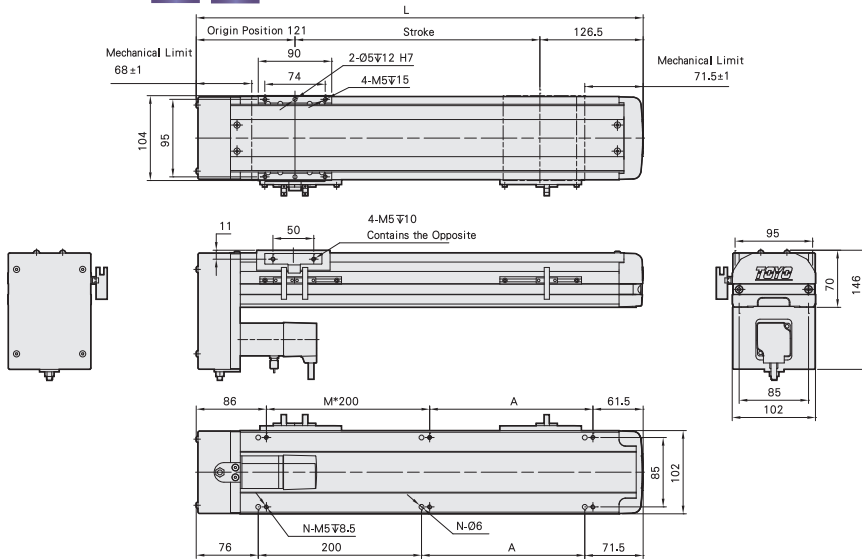
Motor On Lower Side

BM Motor On Lower Side



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(mm)



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	347.5	397.5	447.5	497.5	547.5	597.5	647.5	697.5	747.5	797.5	847.5	897.5	947.5	997.5	1047.5	1097.5	1147.5	1197.5	1247.5	1297.5
A	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
KG	6.6	7	7.4	8.8	8.2	8.6	9	9.4	9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.4	12.8	13.2	13.6	14

Toll-Free Number : China 400-875-0009 Taiwan 0800-800-893

MEMO

Application

Standard/Ball Screw

Rod Type Actuator

Standard/Belt Type

Clean Room/Ball Screw

Clean Room/Belt Type

Linear Motor

Multi Axis

Alignment Stage

Reference

**1 axis
ETH**

ETH5M

ETH6M

ETH10

ETH12

ETH13

ETH14

ETH17

ETH22